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## PATENT ABSTRACTS OF JAPAN

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(71)Applicant : SANYO ELECTRIC CO LTD

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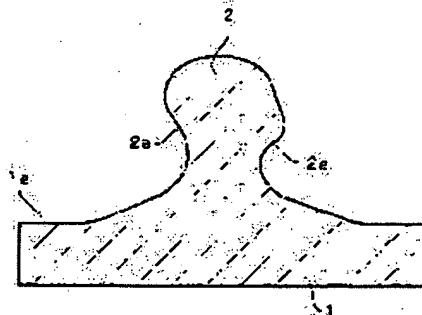
TARUI HISAKI

## (54) ANODE FOR LITHIUM SECONDARY BATTERY AND ITS MANUFACTURING METHOD

## (57)Abstract:

PROBLEM TO BE SOLVED: To improve cycle characteristics by heightening the adhesiveness of a mixture layer with a collector 1 in an anode for a lithium secondary battery obtained by sintering the mixture layer including active material particles containing silicon and/or a silicon alloy and a binder on the surface 1a of a metal foil collector 1 under a non-oxidizing atmosphere.

SOLUTION: The anode for lithium secondary battery is characterised in that an unevenness is formed on the surface 1a of the metal foil collector 1, and at least a part of the side faces of a projection part 2 has warped 2a shapes expanded further outward as they come near tip end, and the binder enters the spaces of the warped parts 2a.



## LEGAL STATUS

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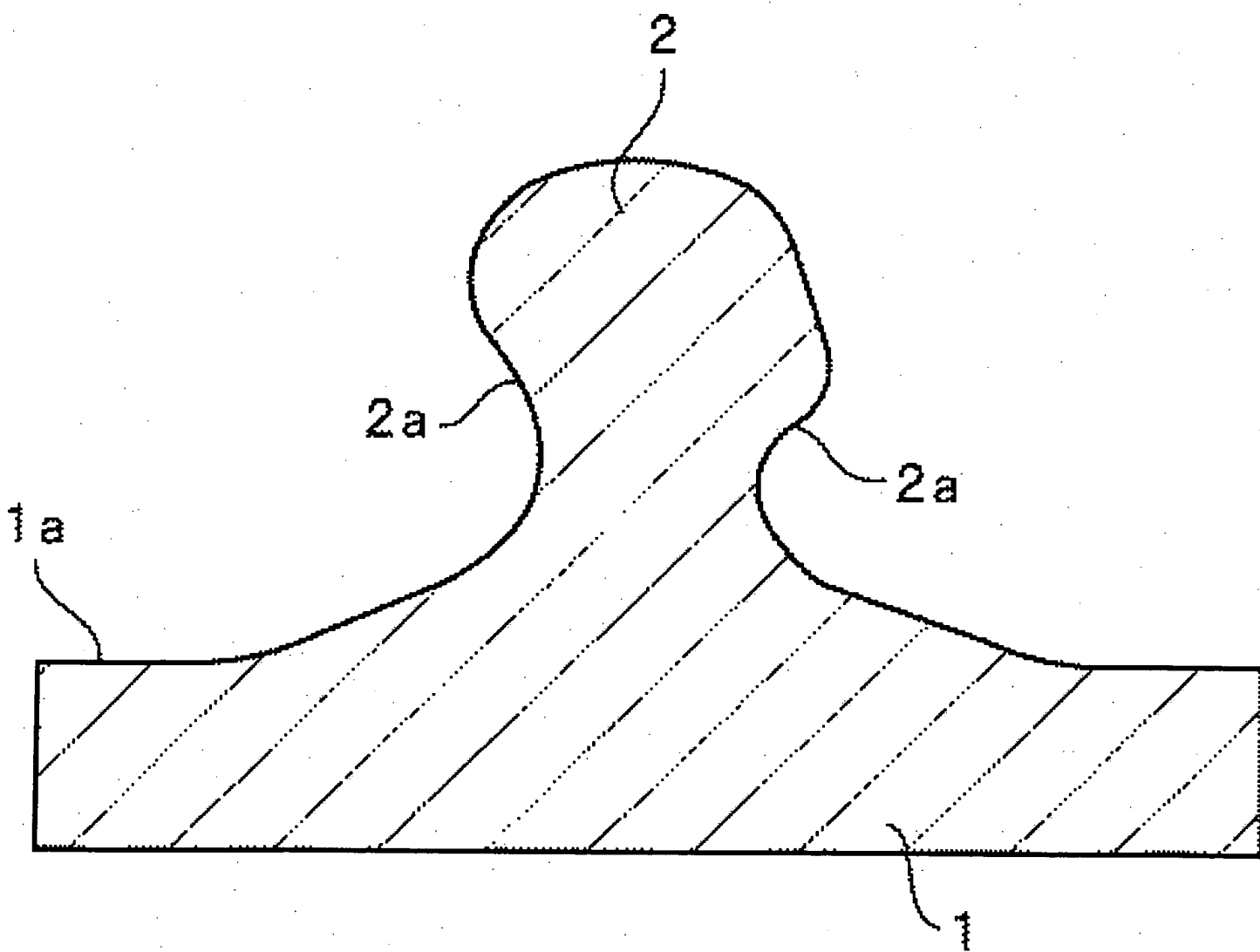
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(54) 【発明の名称】 リチウム二次電池用負極及びその製造方法



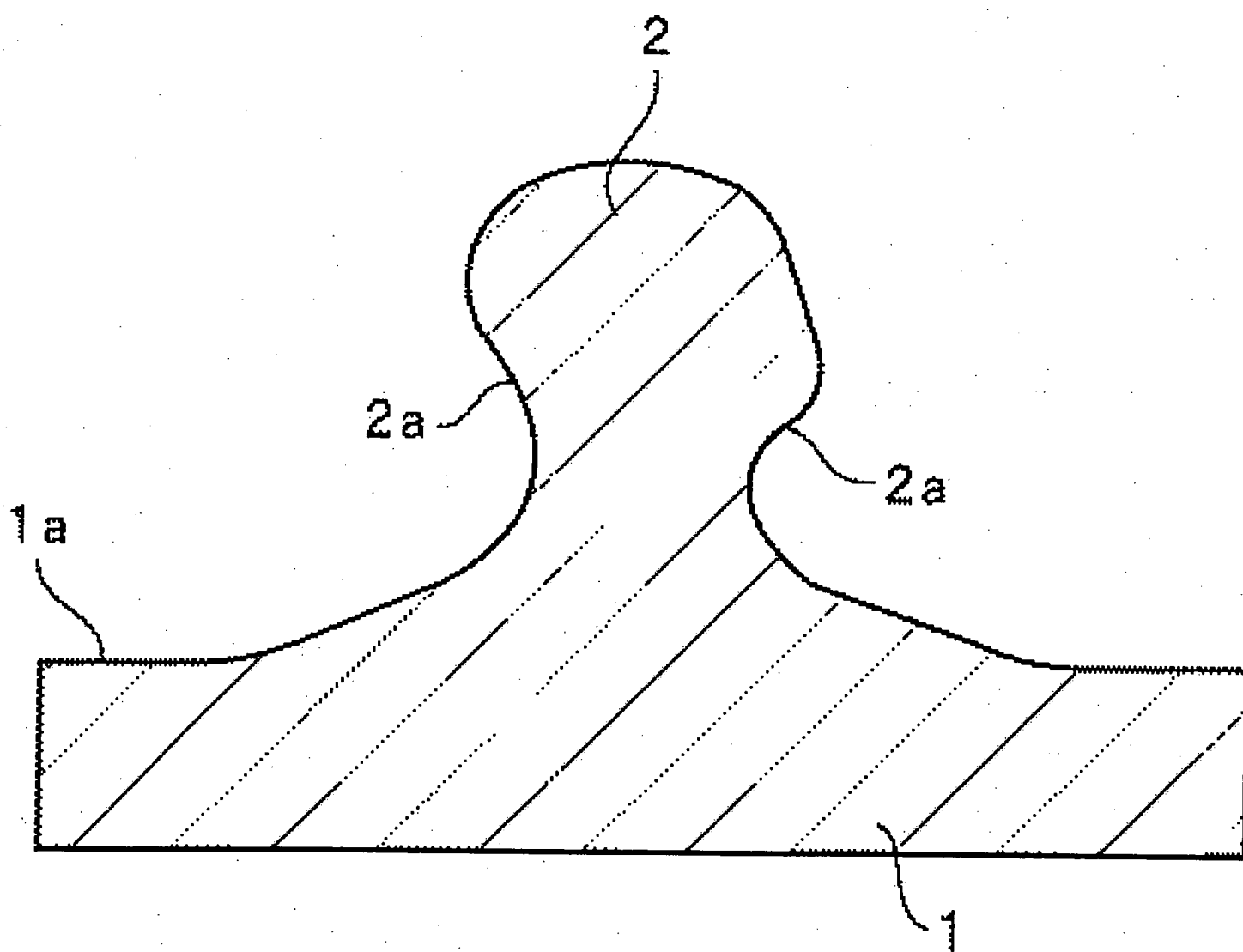
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A 1	a 1	1 0 0
B 1	b 1	4 2

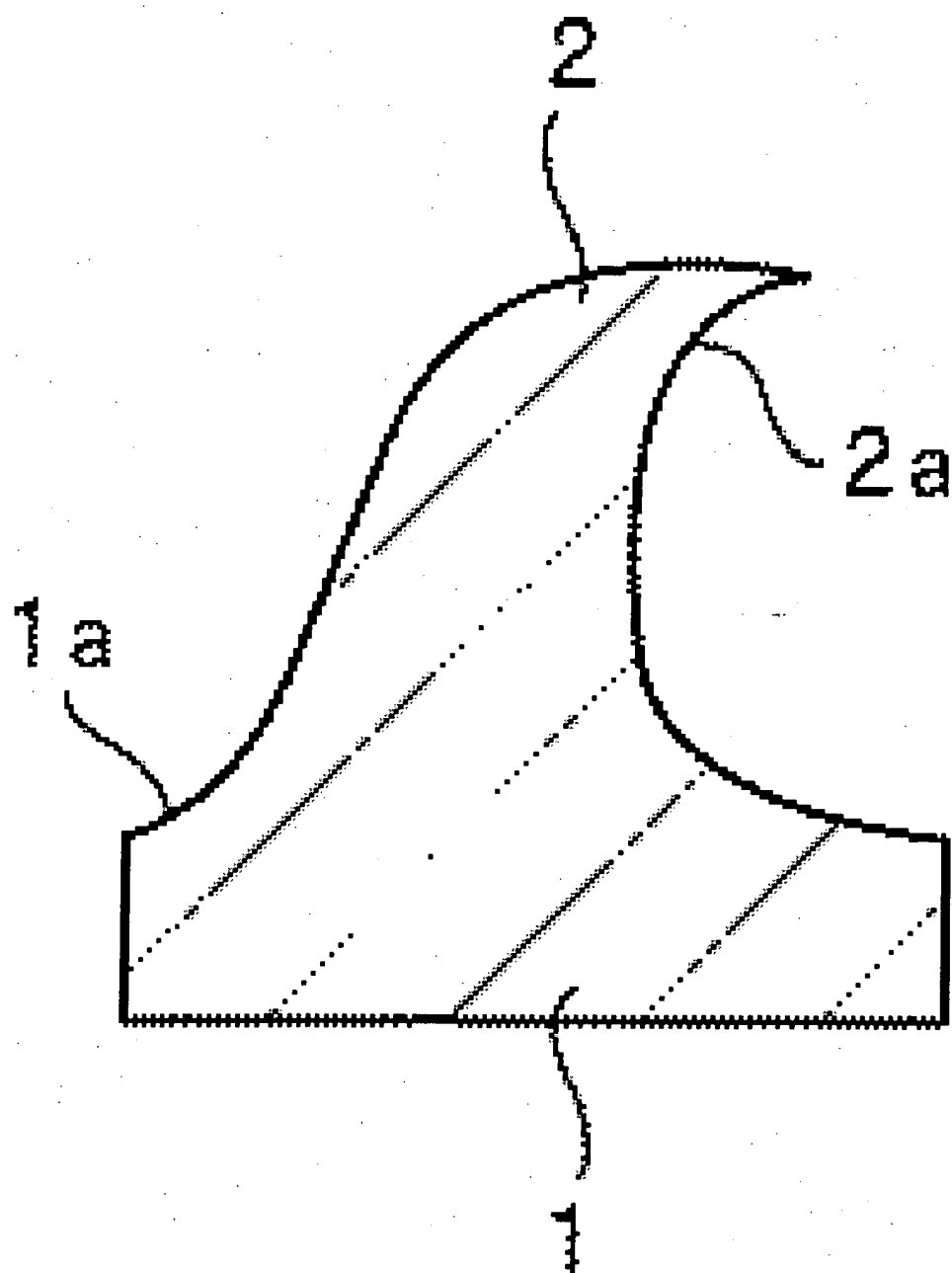
電池	集電体	集電体表面粗さ ( $\mu\text{m}$ )	サイクル寿命
A 1	a 1	1. 0	1 0 0
A 2	a 2	0. 5	9 5
A 3	a 3	0. 2	7 9
A 4	a 4	0. 1 7	6 2

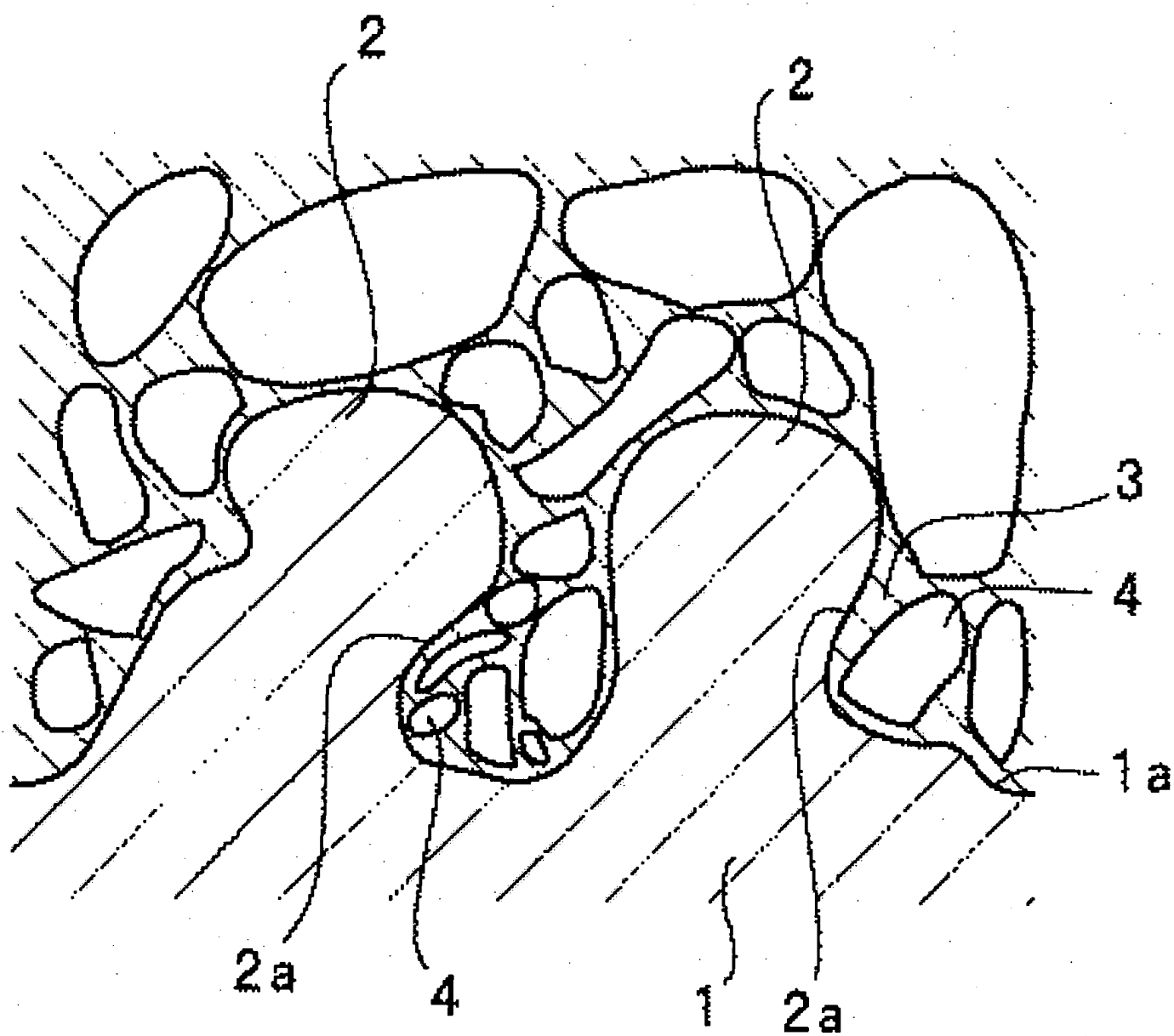
電池	電極熱処理条件	サイクル寿命
A 1	4 0 0℃, 3 0時間	1 0 0
A 5	6 0 0℃, 1 0時間	6 0
B 2	無し	1 7

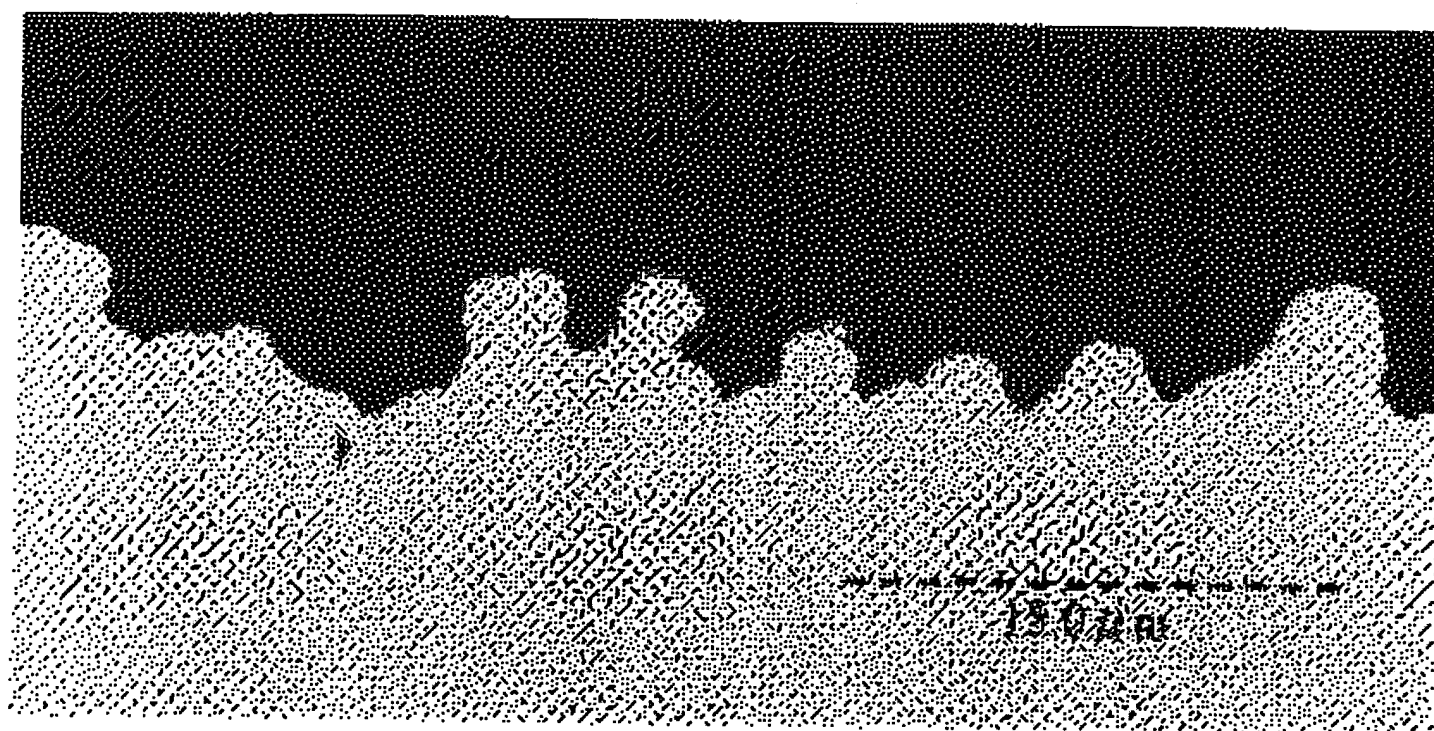
電池	添加導電性粉末	サイクル寿命
A 1	無し	1 0 0
A 6	銅	1 0 2

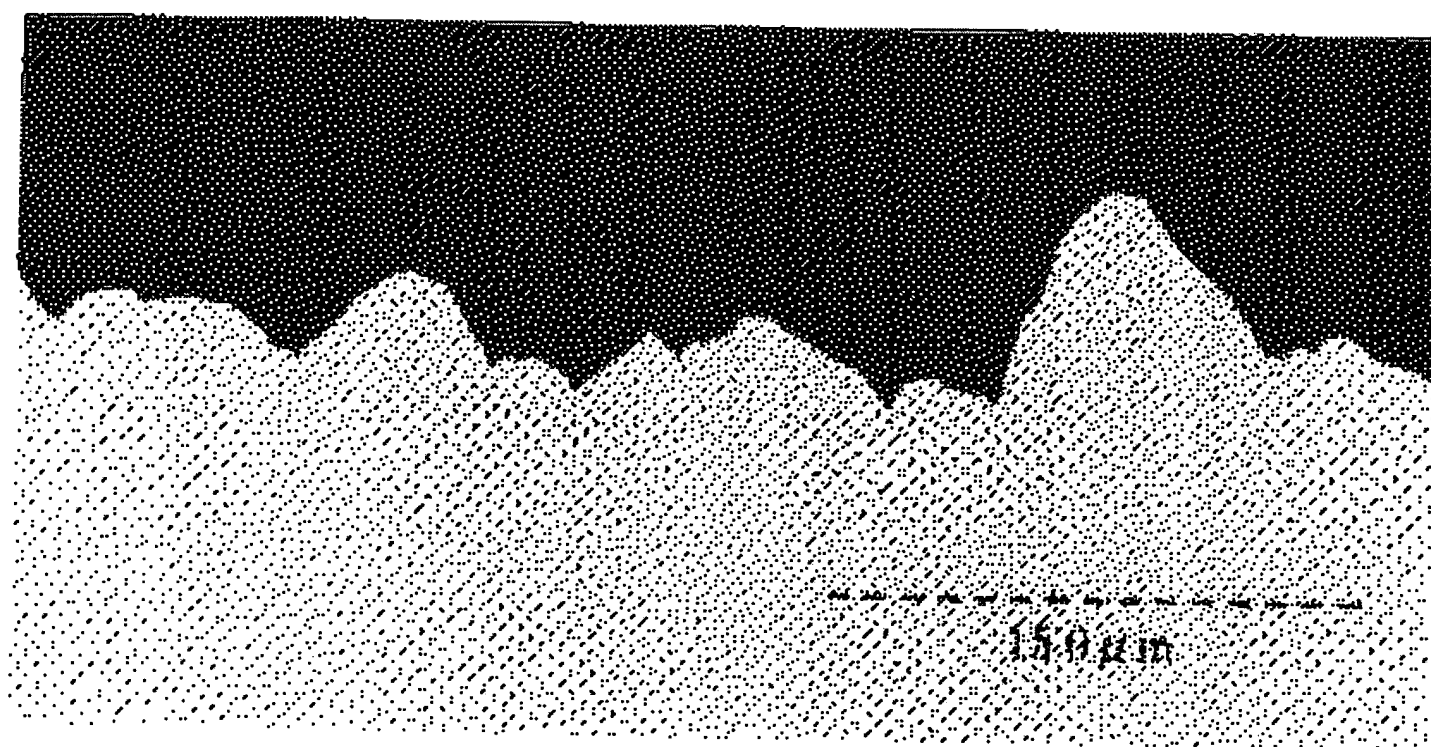


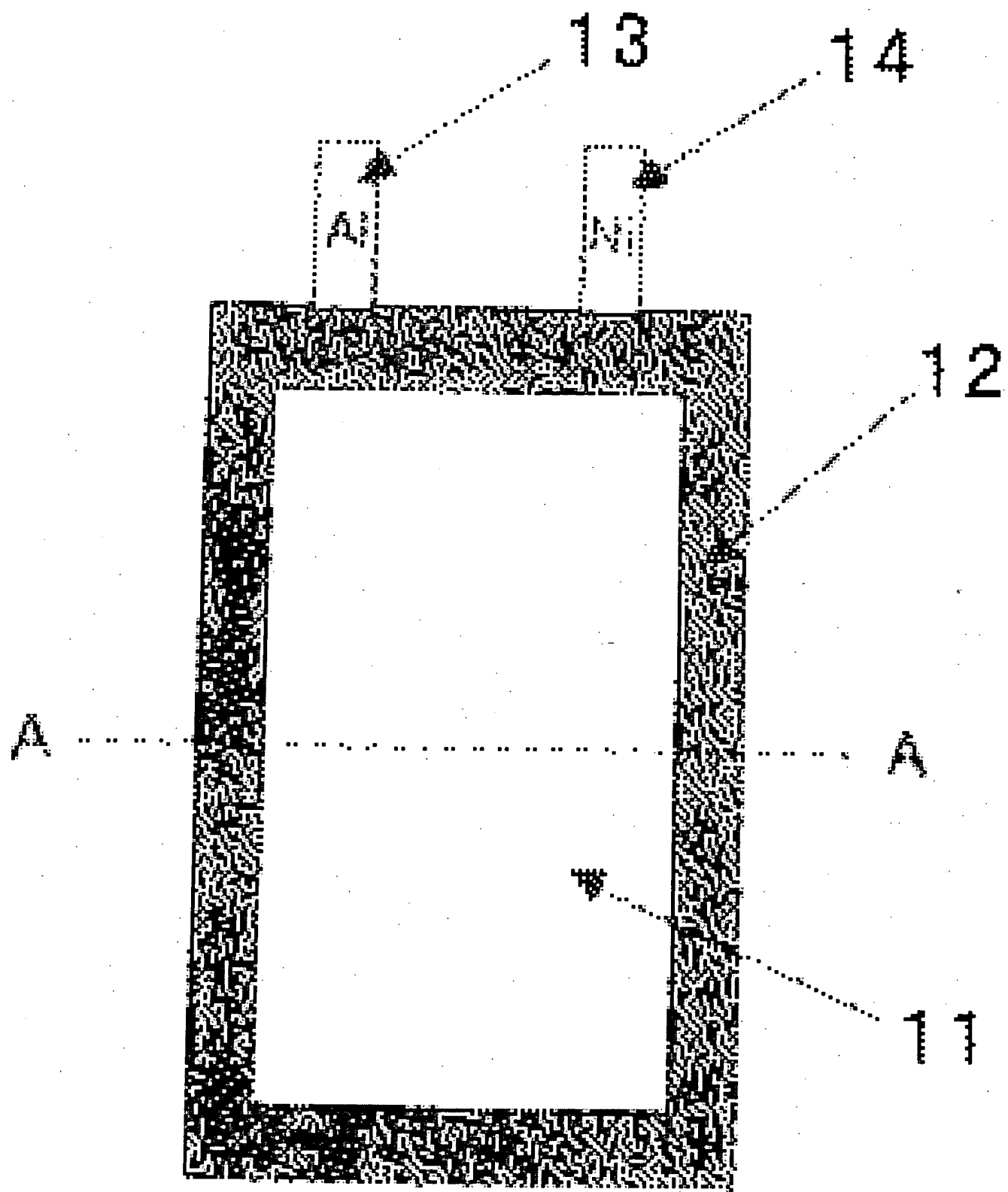


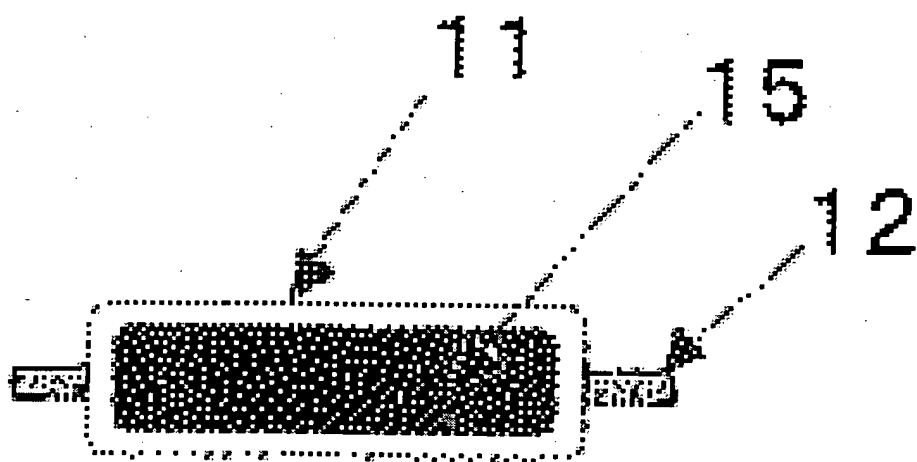












## フロントページの続き

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